Patent 14393-0015

Appl. No.: 09/644,026 Amdt dated March 15, 2004

Reply to Office Action of January 13, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the

application.

1 - 40 (Canceled)

41. (Currently Amended) An implantable device comprising;

first and second anchor plates sized to be positioned within an intradiscal section

between adjacent vertebra, the first and second anchor plates not being coupled to

each other and configured to be individually coupled to one of the adjacent vertebrae,

each anchor plate comprising a plate member and a plurality of anchoring elements

having outer walls that extend substantially perpendicular from the plate member which

do not include threading for screwing the anchoring elements into the vertebrae, a distal

portion of the anchoring elements comprising a lumen extending longitudinally within the

anchoring elements from a distal end of the anchoring elements, the anchoring

elements being introducable into an end plate of one of the adjacent vertebrae to secure

the anchor plate to the vertebrae; and

an intradiscal component positioned between and in contact with the first and

second anchor plates and attach thereto, thereby affixing the intradiscal component to

the implanted first and second anchor plates secured to the adjacent vertebrae.

42. (Previously Amended) An implantable device comprising;

first and second anchor plates sized to be positioned within an intradiscal section

between adjacent vertebra, the first and second anchor plates not being coupled to

each other, each anchor plate comprising a plate member and a plurality of anchoring

elements having outer walls that extend substantially perpendicular from the plate

member which do not include threading for screwing the anchoring elements into the

vertebrae, a distal portion of the anchoring elements comprising a lumen extending

Appl. No.: 09/644,026

Amdt dated March 15, 2004

Reply to Office Action of January 13, 2004

Patent 14393-0015

longitudinally within the anchoring elements from a distal end of the anchoring elements

wherein an interior surface of the anchoring elements is rough, the anchoring elements

being introducable into an end plate of one of the adjacent vertebrae to secure the

anchor plate to the vertebrae; and

an intradiscal components positioned between and in contact with the first and

second anchor plate.

43. (Previously Added) An implantable device according to claim 41, wherein at least

one of the anchoring elements includes a lumen at least 0.5 mm in diameter.

44. (Previously Added) An implantable device according to claim 41, wherein the

anchoring elements have piercing distal ends such that the anchoring elements are

capable of piercing an end plate of a vertebrae which does not already have holes for

the anchoring elements.

45. (Previously Added) An implantable device according to claim 41, wherein the

anchoring elements have beveled distal ends.

46. (Canceled) An implantable device according to claim 41, wherein the intradiscal

component is not coupled to either the first or second anchor plates.

47. (Previously Amended) An implantable device according to claim 41, wherein the

intradiscal component is an artificial disc.

48. (Previously Added) An implantable device according to claim 47, wherein the

artificial disc comprises a nucleus having opposing convex surfaces.

49. (Previously Added) An implantable device according to claim 47, wherein the

artificial disc comprises a nucleus having opposing convex surfaces and a side of each

of the first and second anchor plates opposite the anchoring elements has a concave

surface which is adapted to contact a convex surface of the artificial disc.

Appl. No.: 09/644,026 Amdt dated March 15, 2004

Reply to Office Action of January 13, 2004

Patent 14393-0015

50. (Previously Added) An implantable device according to claim 41, wherein the intradiscal component is coupled to either the first or second anchor plates.

51. (Previously Added) An implantable device according to claim 50, wherein the intradiscal component is an artificial disc.

52. (Previously Added) An implantable device comprising:

first and second anchor plates sized to be positioned within an intradiscal section between adjacent vertebra, the first and second anchor plates not being coupled to each other, each anchor plate comprising a plate member and a plurality of anchoring elements extending substantially vertically from the plate member which do not include threading for screwing the anchoring elements into the vertebrae, a distal portion of the anchoring elements comprising a lumen extending longitudinally within the anchoring elements from a distal end of the anchoring elements, the anchoring elements being introducable into an end plate of one of the adjacent vertebrae to secure the anchor plate to the vertebrae; and

at least two spacer elements which are not coupled to each other, the spacer elements being removably coupled to opposing sides of the first and second anchor plates to keep the first and second anchor plates in a spaced apart relationship.

53. (Previously Amended) A kit for forming an implantable device for insertion into an intradiscal section between adjacent vertebrae, the kit comprising:

first and second anchoring plates sized to be positioned within an intradiscal section between adjacent vertebrae, the first and second anchor plates not being coupled to each other, each anchor plate comprising a plate member and a plurality of anchoring elements having outer walls that extend substantially perpendicular from the plate member which do not include threading for screwing the anchoring elements into the vertebrae, a distal portion of the anchoring elements comprising a lumen extending longitudinally within the anchoring elements from a distal end of the anchoring elements, the anchoring elements being introducable into an end plate of the of one of

Appl. No.: 09/644,026 Amdt dated March 15, 2004

Reply to Office Action of January 13, 2004

Patent 14393-0015

the adjacent vertebrae to secure the anchor plate to the vertebrae, each anchor plate

configured to be individually attached to one of the adjacent vertebrae and having an

intradiscal component coupled thereto, thereby affixing the intradiscal component to the

first and second anchor plates secured to the adjacent vertebrae.

54. (Currently Amended) A kit for forming an implantable device for insertion into an

intradiscal section between adjacent vertebrae, the kit comprising:

first and second anchoring plates sized to be positioned within an intradiscal

section between adjacent vertebrae, the first and second anchor plates not being

coupled to each other, each anchor plate comprising a plate member and a plurality of

anchoring elements having outer walls that extend substantially perpendicular from the

plate member which do not include threading for screwing the anchoring elements into

the vertebrae, a distal portion of the anchoring elements comprising a lumen extending

longitudinally within the anchoring elements from a distal end of the anchoring elements

wherein the interior lumen surface of the anchoring elements is rough, the anchoring

elements being introducable into an end plate of the of one of the adjacent vertebrae to

secure the anchor plate to the vertebrae.

55. (Previously Added) A kit according to claim 53, wherein at least one of the

anchoring elements includes a lumen at least 0.5 mm in diameter.

56. (Previously Added) A kit according to claim 53, wherein the anchoring elements

have piercing distal ends such that the anchoring elements are capable of piercing an

end plate of a vertebrae which does not already have holes for the anchoring elements.

57. (Previously Added) A kit according to claim 53, wherein the anchoring elements

have beveled distal ends.

58. (Previously Added) A kit according to claim 53, wherein the kit further comprises

an intradiscal component.

59 - 62 (Canceled)

Appl. No.: 09/644,026

Amdt dated March 15, 2004

Reply to Office Action of January 13, 2004

Patent 14393-0015

63. (Previously Amended) A kit, forming an implantable device for insertion into an

intradiscal section between adjacent vertebrae, comprising:

first and second anchoring plates sized to be positioned within an intradiscal

section between adjacent vertebrae, the first and second anchor plates not being

coupled to each other, each anchor plate comprising a plate member and a plurality of

anchoring elements having outer walls that extend substantially perpendicular from the

plate member which do not include threading for screwing the anchoring elements into

the vertebrae, a distal portion of the anchoring elements comprising a lumen extending

longitudinally within the anchoring elements from a distal end of the anchoring

elements, the anchoring elements being introducable into an end plate of the of one of

the adjacent vertebrae to secure the anchor plate to the vertebrae; and

at least two spacer elements which are not coupled to each other, the spacer

elements being adapted to be coupled to opposing sides of the first and second anchor

plates to keep the first and second anchor plates in a spaced apart relationship.

64. (Previously Added) A kit according to claim 53, wherein one of the first or

second anchor plates further comprises an intradiscal component.

65. (Previously Added) A kit according to claim 64, wherein the intradiscal

component is an artificial disc.

66. (Previously Added) A kit according to claim 53, wherein the kit further comprises

a mechanism that is removeably couplable to the first and second anchor plates and

keeps the first and second anchor plates in a fixed, spaced apart relationship when

attached to the first and second anchor plates.

67. (Currently Amended) An implantable device, comprising:

at least one intervertebral device;

Reply to Office Action of January 13, 2004

a first anchor plate attachable to a vertebrae and configured to have the intervertebral device coupled detachably secured thereto, the first anchor plate having a first plantplate member;

a second anchor plate attachable to a vertebrae and configured to have the intervertebral device coupled detachably secured thereto, the second anchor plate having a second plate member; and

one or more anchor elements positioned on the first and second anchor plates.

- 68. (Currently Amended) The device of claim 6667 wherein the intervertebral device is selected from a group consisting of an intervertebral cage, an artificial vertebral body, an intradiscal spacer, a hemi-implantable device, an artificial intravertebral disc, and an intervertebral fusion device.
- 69. (Currently Amended) The device of claim 6667 wherein at least one of the first and second anchor plates comprises at least one hollow bore therethrough.
- 70. (Currently Amended) The device of claim 6667 wherein the anchor elements further comprise an outer wall defining an internal lumen positioned longitudinally within the at least one anchoring element.
- 71. (Currently Amended) The device of claim 6670 wherein the internal lumen further comprises a rough interior surface.
- 72. (Currently Amended) A method of implanting an intervertebral device, comprising:

accessing the implantation site;

attaching a first anchor plate to the end plate of a vertebrae;

attaching a second anchor plate to an adjacent vertebrae; and

Appl. No.: 09/644,026 Amdt dated March 15, 2004 Reply to Office Action of January 13, 2004

Patent 14393-0015

coupling detachably securing an intervertebral device to the implanted first and second anchor plates.